



What We are Hearing....

Overview of Comments received on DRAFT Mercury Chemical Action Plan



Coal-Fired Power Plants

- **The MCAPs proposal to wait for federal regulations requiring mercury reduction from coal plants is inadequate. In the short term, Ecology should immediately adopt new air standards that include a 2010 deadline for achieving a zero discharge limit for mercury. O-33**
- **We urge Ecology to adopt stringent requirements for mercury emissions from power plants that will require all plants to reduce mercury emissions by 90 percent by 2007 and 100 percent by 2010. O-34**



Fuel Oil & Oil Refineries

- **No comments received on this issue**



Wood Stoves/Boilers

- **As part of a Reasonable Available Control Technology process in 1998/99, Ecology's Air Division identified mercury as one of the Hazardous Air Pollutants from hog fuel boilers. These industrial boilers are most likely a larger source of mercury pollution than has been identified in the CAP. We would like a more thorough assessment of their contribution to mercury pollution as well as a more comprehensive solution to the problem. Ecology should finish the RACT process that was started for these boilers and prohibit the burning of fuels and wastes that will result in mercury, dioxin and other persistent toxic pollution. O-33**



Mercury Mining

- **We support the plan's recommendation to prioritize abandoned mines as potential toxic waste cleanup sites. We urge Ecology to recommend that the ongoing assessment of abandoned mines be completed quickly. O-34**
- **For the fish-to-human route of exposure DOE might find that direct releases to surface water significantly contribute to mercury in aqueous environments. Important sources of those direct releases could be old mining operations within the State or in neighboring states. O-3**



Gold Mining

- **Urge Ecology to include in the plan a requirement that the investigation of sources of mercury released include studies on the releases of mercury from all mining activities, including through volatilization from tailings piles, waste rock piles, and other sources. We also urge Ecology to require active mines to install stringent control technology to eliminate any mercury emissions identified.**
- O-34**



Gold Mining

- **Mercury air emissions are a concern at modern gold mines. Although their tailings or waste rock piles may be lined to prevent leaching, the mercury in the rock may volatilize into the air. Ecology should immediately require that Washington gold mines measure and report mercury air emissions or prove that there are none. In addition, we support Ecology investigating whether mine tailings disposal facilities are in compliance with dangerous waste regulations and enforcing the rules if they are not. As part of the investigation, Ecology should ensure that there is no cross media shift of mercury pollution from the mining waste to the air in order to comply with the dangerous waste rules. O-33**

Abandoned Placer Gold Mines



- **Small-scale mineral prospectors collect mercury as a side product to gold recovery from streams. Use suction dredging process. Some rivers in WA have “large amounts” of elemental mercury resting on bedrock at the bottom of the river. Interested in working further with Ecology, Dept. of Fish and Wildlife, and other to coordinate future mercury removal efforts. O-21**



Manufacturing

- **Ecology should acknowledge that although other “specialty” products used by the aerospace industry and others, may contain small amounts of mercury, few viable alternative products exist. There are national programs such as FAA flight safety requirements and OSHA worker safety requirements that set acceptable performance standards for some products and their use. The CAP should acknowledge that these national programs are the appropriate means for addressing the limited potential for exposure to mercury from these products. 0-5**



Mercury Fever Thermometers

- **A recent Washington State Hospital Association survey indicates that about half the state's 97 general, acute hospitals are now using mercury-free thermometers for patient care. 0-30**
- **We support mercury thermometer exchanges, particularly in conjunction with pharmacies and other interested parties. We support Ecology's recommendation on this subject. 0-33**



Thermostats

- **Although we generally support the expansion of the Thermostat Recycling Corporation, we do not support Ecology spending its scarce resources on doing it. We believe that the manufacturers of thermostats, which created the pollution problem in the first place, should bear the financial responsibility for making their program work. This is their job, not Ecology's. As mentioned previously, we support the rapid phase-out of mercury thermostats by January 1, 2004. O-33**
- **Thermostat recycling Corporation has now signed up approximately 20 wholesalers to participate in the program. The TRC would appreciate help from Ecology officials in signing up additional wholesalers and in promoting the program with HVAC contractors and support this recommendation in the report. O-4**



Batteries

- **The report says under the current regulation section that consumer products with non-rechargeable batteries should be managed as universal waste. Button cell battery collection does not make sense for the following reasons- it is not cost-efficient and storage of several button cell batteries can create safety hazards. 0-4**



HVAC Equipment

- **HVAC industry has become very progressive in dealing with mercury. Can't buy mercury thermostats – a thing of the past. Mercury thermostats are still used in boilers. Demolition of HVAC outfits is primarily done by “mom and pop” operations. Also, landfills don't handle mercury yet. I took some fluorescent lights to the LF and they said to just put in with the rest of the waste. The best way to handle mercury is the hazardous waste collection at the landfill. Thermostat Recycling Corp (TRC) has two facilities in WA – in Fife and in Spokane. This is convenient for those who live near these facilities, but not convenient for those who don't. We need the proper infrastructure to do this. PM/T-1**



Fluorescent Lamps

- **Burden of collection should not be placed on local government. Local government role should be education and enforcement. Manufacturer take back should be required. Incineration and land-filling of lamps should be prohibited. O-24**
- **State-wide ban for disposal of household generated fluorescent lighting is unenforceable and attempts to supercede current federal and state exemptions. Makes no allowance for consumer use and purchase of reduced mercury content lighting. O-23**



Fluorescent Lamps

- **Mercury in many of the disposed products (fluorescent lamps, thermometers, etc.) never reach the landfill – they are before or during the waste collection process. The most productive and cost-effective strategies for controlling mercury in the waste stream are source reduction, product stewardship, diversion and recovery of specific mercury-containing products, enforcement of existing dangerous waste regulations and public education. O-32**



Fluorescent Lamps

- **Engage lamp manufacturers and distributors in state-level discussions on producer responsibility to support lamp take back efforts by the private sector. Spearhead effort to require labeling of mercury-containing lamps sold in Washington State. Support stronger statewide and local enforcement of existing Universal Waste rule for lamp recycling, including fines when appropriate. O-8**

Vehicle Convenience Light Switches



- **Willing to work on voluntary switch removal programs only. AAM members have phased out the use of mercury switches on motor vehicles effective with the 2003 model year. Believe that end-of-life collection program is more effective. O-2**
- **Need to add the mercury auto switch to the Universal Waste Rule. These switches need to be removed before the vehicle is scrapped. Mercury is often released at the site of an auto accident if the convenience switch is broken. Do it while the vehicle is still operating. This cost should be borne by the manufacturer. PM/T-18**



Medical Facilities

- **WSHA enthusiastically accepts the draft MCAPs recommendation that the state and hospitals work together to develop a voluntary, collaborative program to encourage adoption of mercury reduction policies. MCAP needs to explicitly recognize that for some applications (e.g. Bilirubin lamps) there are no reasonable mercury-free substitutes. O-30**



Dental Facilities - Amalgam Separators

- **Ecology should enforce existing regulations and require dental offices to comply with the provisions of the Dangerous Waste Regulations regarding the discharge of their wastewater. By doing this, Ecology could accomplish its objective of reducing mercury discharges with no new laws, permits, programs or significant resources. Management of mercury waste would be the responsibility of those who use the mercury and would be relatively simple: on-site treatment units are cost effective and effective. Enforcing this regulation would reduce mercury entering local wastewater treatment facilities and septic systems an estimated 40 – 60 percent. O-11**



Dental Facilities - Amalgam Separators

- **The Washington State Dental Association welcomes a “voluntary, collaborative program” between the Ecology and WSDA to reduce the discharge of dental amalgam from dental offices, as proposed in the MCAP. WSDA represents more than 3600 practicing dentists in the state as their primary professional association and has the ability, in conjunction with the ADA and local county dental societies, to conduct long-term information programs on dental waste management. O-28**



Dental Facilities - Amalgam Separators

- **With dental offices, we recently made the transition from a voluntary program to one that requires dentists be in compliance with our local limits for mercury (0.2 mg/L) by July of next year. This decision was taken after a six-year voluntary program failed to achieve compliance. We recommend that if you implement a voluntary program for dental facilities, it should include periodic benchmarks for a specified percentage of dental offices to have installed amalgam separator units each year, working towards 100% compliance. 0-12**



K-12 Schools/Universities

- **Prohibit schools from buying bulk elemental or chemical mercury for classroom use. 0-8**
- **Recommend a mercury round-up for schools and Universities to eliminate as much as possible quickly. Pattern after Department of Agriculture's pesticide round-ups. 0-23**



State Purchasing

- **Require state procurement offices to give priority to non-mercury-containing products when purchasing equipment, supplies and other products. O-8**
- **We urge Ecology to support legislation or an Executive Order that will require state agencies to give preference when purchasing to mercury-free and low-mercury products. O-34**



State Purchasing

- **Include a recommendation to support legislation or Executive Orders for state agencies to purchase mercury-free products when alternatives are available. 0-33**
- **Support stronger recommendations for state purchasing contracts to select mercury-free or lowest mercury content products. This would be more consistent with the Executive Order on Sustainability than the current recommendation. In general, stronger purchasing specifications will help enhance markets for alternative products and will be a model for local governments to follow. 0-22**



Solid Waste Combustion

- **Values should represent current data for emissions (new emission controls in place) not pre-current control data. Confidence level should be “Very High” given the far greater degree of monitoring and data than any other source you are citing. 0-23**



Solid Waste Combustion

- **Believe recommendation to consider prohibition of incineration of fluorescent lamps to be unenforceable due to household exemption. Should use new emissions data for Spokane, reflecting greater level of mercury control, and confidence level should be “very high.” City of Spokane Waste to Energy Plant does not accept fluorescent lighting from CESQG’s, though it does from households. 0-23**
- **Ban the disposal of mercury products from solid waste. 0-8, 0-11, 0-13, 0-14, 0-16, 0-17**



Landfills

- Ecology should invest in preventing mercury products from entering landfills, rather than testing landfill emissions. If landfill study does proceed, Ecology should more clearly define the hypothesis to be tested. Landfill emissions are not a significant source of mercury to the environment. The draft plan mischaracterizes the amount of mercury disposed of in solid waste landfills. 0-32



Landfills

- Ban the disposal of mercury products from solid waste. 0-8, 0-11, 0-13, 0-14, 0-16, 0-17



POTWs

- **We strongly disagree with the recommended actions in the Medical and Dental Facilities sections that would require increased POTW monitoring of mercury levels in the biosolids and effluent. These recommendations essentially shift the burden of mercury reduction to Publicly Owned Treatment Works (POTWs) in the event that voluntary programs are not successful. This shifts the cost of mercury reduction from the generator of the waste to the ratepayers. Treating for mercury at the treatment plant is prohibitive. POTWs can only effectively control pollutant loading by doing source control. This recommended action could have the undesired consequence of increasing the numbers of POTWs that are in violation of their NPDES permits, in spite of any efforts at source control. 0-12**



POTWs

- **With respect to POTWs, we urge Ecology to eliminate mixing zones for mercury for POTWs and all other discharges. Mixing zones have absolutely no capacity to mitigate the impact of mercury in the environment. Permittees should not be allowed to discharge mercury at levels that exceed water quality standards. O-34**



POTWs

- **EPA has been conducting studies of air deposition of mercury through out the United States. One of the areas of monitoring is WA. From the data developed, EPA estimates that 85% of Mercury contamination to WA is from air deposition from Asia. In urban areas, much of this air deposition is finally deposited to local waterbodies via scouring from stormwater runoff. The MCAP developed by Ecology makes no mention of the 85% of Mercury pollution deposited in WA state via Asian pollution cited by EPA and the United Nations. And, the MCAP makes no mention of urban stormwater as a carriers of such pollution. O-1**



Sewage Sludge Incinerators

- Recommended that mercury from incineration be based upon stack testing data and ash analysis. Results may be over-estimated. 0-27
- Oppose burning of waste that contains mercury from any source. 0-28



Crematoria

- **No practical way to remove dental fillings from deceased after death. Funeral director/embalmer prohibited from “mutilating” a deceased body, cost prohibitive for families to pay a dentist to remove fillings prior to cremation. Most bodies cremated are not embalmed. DOH requires that are not embalmed to be refrigerated w/in 24 hours of death. Refrigeration units not designed for a dentist to work within them. O-29**
- **Further study and monitoring of mercury releases from crematoria suggested. O-33**



Toxic Waste Cleanup Sites

- MCAP does not adequately characterize extent of mercury contamination at known hazardous waste sites (both upland sites and sediment sites). More detail should be provided about several known (primarily urban/industrial) MTCA sites that have mercury contamination. O-33



Fish Advisories

- **EPA estimates that up to 1.16 million women of childbearing age eat enough mercury-contaminated fish to pose a risk of harm to their future children. Given the harm that eating mercury-contaminated fish poses, it is critical that Washington have a program to effectively monitor levels of mercury in fish, issue fish advisories in a timely manner, and communicate the risks to the public. Unfortunately, no where in the plan does it call for an evaluation of the effectiveness of Washington's current program. A thorough examination of this program is critical to ensuring that the health of consumers, especially the health of members of sensitive populations like pregnant women and children, is protected. We urge Ecology to include a recommendation in the plan for Ecology and the Department of Health to conduct a review of the state's fish advisory program to ensure that it effectively protects the public's health. O-34**



Fish Advisories

- **The "fish" cited as essential to avoid for children and women of childbearing age by EPA, FDA and the WA Dpt. Of Health are shark, swordfish, tilefish, king mackerel, and tuna steak. WDOH cautions women of childbearing age and children should only eat limited amounts of canned tuna. But consumption of canned tuna is ok. First, two of the fish listed are not even found in the Pacific. And most of the fish commercially caught are found in warm waters far from WA. O-1**



Mercury Products Legislative Strategy

- Develop legislative strategy during 03-05 biennium that promotes and supports:
 - principles of product stewardship,
 - product labeling,
 - bans on the use of mercury in products – where clearly and immediately unnecessary
 - phase outs of other unnecessary uses of mercury in products